## APPENDIX A

## TECHNICAL COMMENTS AND CLARIFICATIONS OF CALIFORNIA DEPARTMENT OF WATER RESOURCES ON

Draft Environmental Impact Statement for Hydropower License Oroville Facilities FERC Project No. 2100

## Purpose of Action, Proposed Action and Alternatives

- 1. Page 1, footnote #8 Table 5.2-1, Land Ownership in the Study Area (pp. 5-11), Final Land Use L-1 Study Report correctly cites total federal, BLM, and USFS land acreages within the Project as 6,240, 4,620, and 1,620 acres, respectively.
- 2. Page 6, 1st full paragraph; line 5 sentence should read: "...one or more of five resource specific work groups..."
- 3. <u>2.1.1 Existing Project Facilities</u>, pages 13-18 The text fails to include a description for the hatchery water supply pipeline from the Thermalito diversion dam or flow diverted to the hatchery.
- 4. Page 16, Table 1 Definitions The DEIS defines High Flow Channel as Thermalito Afterbay Outlet to confluence with Honcut Creek. For the purposes of the Settlement Agreement articles, the High Flow Channel should be defined as the Feather River from the Afterbay Outlet downstream to the Project boundary.
- 5. <u>2.1.2 Project Boundary</u>, page 19, 1st paragraph, line 15 The Project boundary does not follow the Oroville Wildlife Area (OWA) boundary in this area.
- 6. <u>2.1.3.5 Minimum Instream Flows and Water Temperature</u>, Page 23, Table 2 Staff should note that additional reductions in the minimum flows shown on Table 2 are possible, per the 1983 Agreement which carries over to the Settlement Agreement, under the following conditions:

If the April 1 runoff forecast in a given water year indicates that, under normal operation of the Project, Oroville Reservoir will be drawn to elevation 733 feet (approximately 1,500,000 acre-feet), minimum flows in the High Flow Channel (HFC) may be diminished on a monthly average basis, in the same proportion as the respective monthly deficiencies imposed upon deliveries for agricultural use from the Project; however, in no case shall the minimum flow releases be reduced by more than 25 percent. This condition is correctly described in Section 3.3.1.2, page 92 of the DEIS.

7. Page 24, Table 4 – This table represents a weekly time step of the ramping criteria outlined in a now defunct agreement between DWR and DFG. The weekly time step was calculated for consistency with the modeling tools used in the relicensing process. The actual ramping criteria in the agreement were:

Feather River Low Flow	Rate of Decrease (cfs)	
Channel Releases		
(cfs)		
Less than 2,500	200 per 24 hours	
2,500 to 3,500	500 per 24 hours	
3,500 to 6,500	1,000 per 24 hours	
Greater than 6.500	2.000 per 24 hours	

Although the agreement that outlined this ramping criteria was superseded by the 1983 Agreement and the 1983 Agreement only specifies a ramping criteria for Low Flow Channel releases less than 2,500 cfs, DWR still maintains this criteria in its operations procedures and should be considered as part of the baseline and future project condition.

- 8. Pages 26 and 27 FERC combines the Low Flow Channel and High Flow Channel Temperature tables and erroneously states that DWR would operate to them and that they eventually become requirements. As expressed elsewhere in our comments, DWR will operate to Table 1 in the Low Flow Channel which eventually become a requirement. DWR will not operate to Table 2 in the High Flow Channel, rather this table will be evaluated and eventually modified.
- 9. <u>2.3.1 Water Quality Certification</u>, Page 37, 1st full paragraph On October 16, 2006, DWR withdrew its original application and re-applied for 401 certification with the SWRCB.
- 10. <u>2.4.3 Retiring the Project</u>, page 40, 1st bullet item The first bullet of Section 2.4.3 is worded incorrectly. It should be modified to read: "Energy currently generated by the Project would be lost. The Project is estimated to produce an annual average of 2.4 million MWh of electrical power, providing about one-third of the electricity needed each year to operate the pumps that move water through the State Water Project."

## **Environmental Analysis**

- 1. <u>3.1 General Setting</u>, page 43, 3rd paragraph The maximum normal pool elevation for Lake Oroville is 899 feet msl not 900 feet msl 900 feet is the absolute maximum although water surface may actually be higher during a flood equal to or greater than the Project design flood.
- 2. <u>3.3.2.1 Affected Environment</u>, page 73, 2nd full paragraph This paragraph describes the contracts with all FRSA water users in general, but the 994,000 acre feet of water commitment includes only contracts with Western Canal Water District and the Joint Districts Board. The paragraph continues describing the diversion locations, but only describes the volume of diversion for the Thermalito Complex for the April through October period, and the Feather River and Thermalito Afterbay diversions for the largest diversion volume on record.
- 3. Page 73, 2nd full paragraph Suggest changing the sentence "The actual amount delivered varies from year to year and can exceed the above amount," by deleting "and can exceed the above amount" because water rights holders cannot divert more water than their water rights.
- 4. Page 74, Table 15 Flood control requirements for Lake Oroville need to be corrected. The full flood control storage space should be provided between October 15, and April 1 of each year. The

full flood control storage space varies with the wetness index, <sup>1</sup> 750,000 acre-feet of flood control space should be provided when the ground is wet (wetness index of 11 or greater) and 375,000 acre-feet should be provide under dry ground conditions (wetness index of 3.5 or less). Flood control space requirements prior to October 15 and subsequent to April 1 are determined by drawdown and filling rates, respectively. Prior to October 15, the reservoir can be drawn down at a rate of 25,000 acre-feet per day so that flood control operations effectively begin on September 15 of each year. <sup>2</sup> Subsequent to April 1, the filling rate is 10,000 acre-feet per day so that the end of flood operations can be as early as May 8 or as late as June 15. Consequently, there are no flood control requirements from June 16 to September 14 of each year.

- 5. Page 78, Table 19 The temperature objective for the period from December 1 March 30 should be listed as: =55°F
- 6. Pages 80 & 81, Table 20 "hatchery pool" should be changed to "Fish Barrier Pool."
- 7. Page 89, 1st full paragraph, line 8 Note that Bedrock Park is not part of the "Thermalito Complex" (nor Lake Oroville), nor is it a DWR facility. It is located outside the Project boundary and not a Project facility.
- 8. Page 89, Table 24 There is a note "b" at the bottom of the table, but no reference to note "b" in the table.
- 9. 3.3.2.2 Environmental Effects, page 91, 6th full paragraph Under the discussion of "Flow/Temperature..." in Section 3.3.2.2, the reference to replacement or refurbishment of the river valves needs to be clarified to say that "the total combined capacity of both river valves varies depending on reservoir storage; however, the river valves have been operated with a maximum capacity of about 1,500 cfs as an emergency outlet for downstream temperature management (solely for the FRFH) and water supply purposes. Under the provisions of Section B108(a) of the Settlement Agreement, DWR will investigate the necessary minimum repairs or refurbishment to assure their ability to continue to be used reliably up to the 1,500 cfs flow.
- 10. Page 91, footnote #43 This footnote needs to be reworded to reflect the fact that there are actually two sets of valves. One set for each of the two 72-inch diameter steel conduits. Each set of valves is comprised of a 72-inch spherical guard valve and a 54-inch fixed-cone dispersion valve. The discharge capacities vary with reservoir storage; the spherical valves and appurtenant structures were rated when installed at 2,700 cfs with 428 feet of head for a combined capacity of 5,400 cfs.
- 11. Page 95, footnote #48 A siren was installed at Oroville Dam as an Interim Project to alert recreationists and others in the Diversion Pool area downstream of Oroville Dam that spillway releases are imminent.
- 12. Page 97, first line, item number (3) This should read "increase flow releases in the Low Flow Channel up to a maximum of 1,500 or the minimum of High Flow Channel flows, whichever is the lesser. (See Proposed License Article A108.1(b)(iii)).
- 13. Page 97, 3rd full paragraph The statement, "...or after 10 years, whichever occurs first..." is only applicable to the FRFH temperature objectives. Similar correction needed on page 374.

<sup>&</sup>lt;sup>1</sup> The Wetness Index is an index computed by multiplying the previous day's index by 0.97 and adding any new precipitation, thus it is based on accumulated precipitation.

new precipitation, thus it is based on accumulated precipitation.

<sup>2</sup> For example, if on September 15 we begin to drawn down at 25,000 acre-feet per day, we would be able to provide the full 750,000 acre-feet of flood storage space by October 15.

- 14. Page 98, 3rd full paragraph, last sentence The reference in the 3rd full paragraph to Section 3.3.9.2 should say "Section 3.3.10.2."
- 15. Page 98, 4th full paragraph Staff indicates Proposed License Article A108; however, the appropriate reference should be Proposed License Article A107 since Staff is discussing the Feather River Fish Hatchery.
- 16. Page 98, last paragraph and page 99, 1st full paragraph the DEIS indicates only the river valve would be used to meet Feather River Fish Hatchery temperatures. The three methods actually available include: eliminating pump-back, removing stoplogs at the Hyatt intake structure, or potentially using the river valves.
- 17. Page 101, 2nd and 3rd full paragraph Staff states that "...One example of an improvement would be physically modifying the opening of the forebay to enhance circulation within the cove to reduce bacteria levels. Reconnaissance efforts for potential water quality improvements could be included as part of the facility modification feasibility study DWR proposed as part of the modified temperature regimes for the Low Flow and High Flow Channels."
  - This type of investigation is far beyond the scope of the proposed facility modification(s), which are related specifically only to efforts to improve temperatures in the lower Feather River. Furthermore, "Physically modifying the opening of the Forebay to enhance circulation" should not necessarily be characterized as an "improvement," because increased circulation will likely result in a reduction of the recreational use water temperature there.
- 18. <u>3.3.3.1 Affected Environment</u>, page 103, 2nd bullet item Green sturgeon: DEIS indicates status as candidate for listing under CESA or FESA. This species was listed in 2006 under FESA as threatened.
- 19. Page 104, Table 25 Green sturgeon status listed as "FC," a candidate for listing under the federal ESA. Revise based on recent (June 2006) Federal ESA listing as "threatened". (Federal Register Notice (April 7, 2006))
- 20. Page 112, 1st full paragraph Staff's statement that "...The estimated potential losses of nutrients and organic matter were found to be substantial, but the significance of the losses was difficult to evaluate because of limitations in the available information, including imprecision of the estimates for potential spawning densities and insufficiently low detection levels of measured nutrient concentrations in the upstream tributaries." is not entirely accurate. Additional data collection for nutrient concentration at lower detection levels were presented in SP-W1. It indicated that the upstream tributaries were not nutrient deprived.
- 21. Page 117, 2nd full paragraph The statement that "...The High Flow Channel is considered a migratory corridor for adult spring-run Chinook salmon, and few, if any, of these fish are thought to hold or spawn there (NMFS, 2004)." may not be entirely accurate. DWR's studies indicated that about 1/3 of the spawning is taking place in the High Flow Channel (Final Report Evaluation of Potential Effects of Oroville Facilities Operations on Spawning Chinook Salmon SP-F10, Task 2B). However it is difficult to separate the spring run and fall-run.
- 22. Page 117, 5th full paragraph DEIS states that a repaired levee now, "...connects flows directly from the Feather River into the OWA, which has resulted in areas of the OWA being permanently inundated." This is an inaccurate description. The levee repair (which included a levee notch to allow overflow during flood events) does not provide any direct surface water connection as the description implies. However, the outside (upstream side) of the repaired levee is bordered by a pond which discharges into the Low Flow Channel of the Feather River. Sometime after the levee repair, beavers dammed this outlet and elevated the water level of the pond by several feet. This elevated water level then percolated through the levee and contributed to increased standing water elevations within that portion of the OWA (beaver dams within the OWA also contributed).

However, this is not a permanent condition; high flows in 2006 altered the pond outlet channel (perhaps making it unsuitable for future beaver dams) and water elevations in the OWA have dropped correspondingly. FERC staff should clarify that there is no direct, surface water connection at this upstream portion of the OWA and that the pond elevations within this portion of the OWA are in dynamic transition (as a result of both physical and biological events), not a fixed state.

- 23. Page 122, 3rd paragraph It says that brook trout are currently stocked in the forebay. This is no longer correct; brook trout have not been stocked in the forebay since 2004.
- 24. Page 122, 5th full paragraph DEIS states that "Chinook salmon are discussed in Section 3.3.5, Threatened and Endangered Species." However, that section only discusses spring-run Chinook salmon. An account of fall-run Chinook salmon within the study area should be included in this section. Spring-run Chinook salmon are listed under the ESA, but fall-run Chinook salmon are a species of primary management concern for economic and recreational reasons.
- 25. Page 135, 2nd paragraph Here the DEIS states that rainbow and lake trout are caught periodically and brown trout are commonly caught. Actually none of these fish are commonly caught; rainbows are periodically caught, lake trout and brown are rarely caught.
- 26. Page 136, 6th paragraph, last sentence This sentence states that water disinfection at the Feather River Fish Hatchery would help prevent disease transmission to ESA-listed salmonids which may result from a coldwater fish stocking problem. Despite intensive efforts (DWR. 2004s Evaluation of Project effects on fish disease. Final Report. Oroville Facilities Relicensing FERC Project 2100. California Department of Water Resources, Sacramento, CA), our studies have found no evidence that diseases originating at the Feather River Fish Hatchery negatively effect ESA-listed salmonids or any other fish species. The purpose of water treatment at the hatchery is to protect hatchery production from disease catastrophic loss, not to protect wild salmonids. This inaccuracy should be corrected.
- 27. Page 136, last paragraph to top of Page 137 Proposed License Article A111 describes the license provision to provide a stocking program for Lake Oroville. No reference is made in the proposed article to stocking the Thermalito Forebay. As such, analysis of genetic introgression associated with rainbow trout escaping the forebay should be moved to another area of the document. DWR does not stock rainbow trout in the forebay; this is done by DFG.
- 28. Page 137 The statement that DWR would identify primary and secondary sources of hatchery salmonids for the forebay stocking should probably be a reference to stocking in Lake Oroville.
- 29. Pages 137-138 – Staff states in the 7th full paragraph, 3rd line, that "After a flood event in 1997, DWR repaired a levee in the OWA with a culvert that connects directly to the Feather River and creates permanently inundated areas. This is incorrect. DWR installed a levee notch which allowed flood flows to access the OWA "D" area. Apparently, the culvert was used during construction and not removed upon project completion, but has little to do with water levels in the OWA "D" area. Further these wetlands are not permanent. There is no surface water connection between the lower Feather River and the OWA, except for this single culvert outlet located in the High Flow Channel. The water draining out of the OWA at this area functions essentially as a very small tributary and, unlike a diversion canal or pump, such discharge inputs are not screened. Salmonids could volitionally enter the OWA ponds through this culvert, but there is no evidence to suggest that this actually occurs or that it is a significant problem. Salmonids only enter the OWA during extreme flow events that overtop levees separating the OWA from the river. During extreme flow events, salmonid stranding and mortality in the OWA undoubtedly does occur, but this is beyond the control of the Licensee. FERC staff should clarify that surface waters of the Feather River do not flow into the OWA and that there is no evidence that a significant OWA salmonid mortality problem could exist under normal (i.e. non-flood) conditions.

- 30. Page 150; 3rd full paragraph; 5th line Staff notes that "About 200 acres of land are tilled and planted each year . . ." About 60 acres, not 200 acres, were tilled and planted each year historically, and none have been planted for several years. This discrepancy should be corrected.
- 31. Page 152, Table 38 Staff's discussion of species occurrence does not match results presented on pp. 14-1 and 14-2 of relicensing Study SP-T2. California gull, common loon, Cooper's hawk, double-crested cormorant golden eagle, lark sparrow, and northern harrier were all "found" in the study area. This should be corrected.
- 32. Page 154, first line of first paragraph "resting" should be "nesting."
- 33. Page 155, 4th full paragraph, last 2 lines the DEIS notes the proposed continued enforcement of a 5-mile-per-hour boating speed limit on the Thermalito Afterbay north of Highway 162 and the limitation on potential effects of recreational boating on grebes. The potential impact to grebes from recreational boating is to nesting birds, and no nest colonies exist north of Highway 162. Thus, there will be little or no benefit to nesting grebes north of Highway 162.
- 34. Page 156, 1st full paragraph, 12th line "ext end" should be replaced with "extent."
- 35. Page 157, 1st 2 lines from top of page For accuracy and clarity, the phrase "... and reduces the amount of wintering waterfowl nesting habitat" should be changed to read "... and reduces the amount of waterfowl wintering and nesting habitat."
- 36. Page 158, 4th full paragraph DPR does not do any maintenance within the OWA. No transmission line right-of ways exist within the OWA.
- 37. Page 158, 5th full paragraph North Thermalito Forebay is not in the OWA.
- 38. <u>3.3.5.1 Affected Environment</u>, Page 161, 2nd full paragraph, 2nd line There are actually 4 ESUs of Central Valley Chinook: Spring-run, Fall-run, Late Fall-run, and Winter-run.
- 39. Page 168; 7th full paragraph, last 2 sentences Staff states "DWR is going to abandon and then revegetate, by December 2006, all roads that DWR determines are no longer necessary and needed to facilitate Project operations or management." DWR has since completed this task. OFD Civil Maintenance abandoned one road segment near vernal pools and it is fully vegetated.
- 40. 3.3.5.2 Environmental Effects, page 170, 4th full paragraph Here, the DEIS states that most steelhead spawning occurs in the Low Flow Channel because it provides the coldest, and therefore most suitable temperatures. This is inaccurate and inconsistent with study results (SP-F10 Task 3A). Steelhead spawn in winter when temperatures are suitably cold everywhere in the lower Feather River. The best explanation for the distribution of steelhead spawning appears to be affinity for the Feather River Fish Hatchery itself, or for upstream most areas in general (SP-F10 Task 3A).
- 41. Page 171, 2nd full paragraph Here, the DEIS states gravel supplementation would have no beneficial effect on spatial segregation of spring- and fall-run Chinook salmon. This is a non-sequitur since segregation of salmon spawning is not the goal of gravel supplementation. Rather, the fish segregation weir and the habitat expansion program are intended to correct this problem. However, gravel supplementation will benefit spring-run Chinook once the segregation weir is in place by improving the quality and quantity of available habitat.
- 42. Page 172, 6th full paragraph The first sentence should be revised to more accurately reflect the historic impacts to the river. Hydroelectric development was preceded in the 1800s by aggressive mining techniques that included complete diversion of the North Fork Feather River through a pipeline so that the miners could access the riverbed. This quite effectively blocked fish passage and access to habitat above Oroville for many years prior to hydro development. Moreover,

- PG&E maintained a seasonal flashboard dam downstream of the current Highway 162 bridge until DWR built the Oroville Facilities.
- 43. Page 173, 1st paragraph, last sentence The monitoring weir will not be used for segregation of Chinook spawning runs. Functional segregation of spring run will require a new structure and an egg taking station for fall run.
- 44. Page 173, 5th full paragraph Replace "(fish that return between September 1 and 15)" with "(fish that arrive in May and June)." Also, add the word "Untagged" as the first word of the last sentence in this paragraph.
- 45. Page 173, 6th full paragraph The DEIS states that Feather River Fish Hatchery spring-run Chinook are not included in the ESU. This is incorrect. Natural and hatchery-origin Feather River spring-run Chinook are both listed in the Central Valley spring-run ESU. This fact is characterized correctly in other parts of the DEIS.
- 46. Page 173, 7th full paragraph, 1st sentence Replace the word "small" with "significant." The number of salmon (apparent spring-run) spawning in the Feather River far exceeds the number that enter the Feather River Fish Hatchery.
- 47. Page 173, last paragraph, 1st sentence Replace the first sentence with the following, "Currently in the Central Valley, spring-run Chinook salmon are threatened and fall-run Chinook salmon populations are significantly depressed from historical levels. However, the Feather River contains robust populations of both species which well exceed pre-project levels." Staff's statement that "Historically the Feather River fish hatchery did not reproductively isolate or maintain the genetic integrity of the spring- and fall-run Chinook salmon stocks" is not accurate. DFG did attempt to maintain the genetic integrity of the spring- and fall-run, and many of their spawning protocols were based on this.
- 48. Page 173, last paragraph, last sentence The purpose of the egg-taking station is to allow continued artificial propagation of fall-run Chinook salmon by the Feather River Fish Hatchery, not to provide "genetic material." The egg taking station would only be necessary after the segregation weir is deployed.
- 49. Page 176, 8th full paragraph and Page 353, 4th full paragraph The words "cooler water" should be replaced by "Water temperature". Both warmer and colder waters are useful for managing disease. Mortality resulting from IHN is reduced at temperatures in excess of 59F, which is why the Feather River Fish Hatchery has often moved its fish to its annex facility during IHN outbreaks. See also Section 5.1.2.3, p. 353, 4th full paragraph.
- 50. Page 176, 9th full paragraph and Page 353, 4th full paragraph The statement that "Cooler temperatures are also correlated with better growth and survival rates of coldwater species due to improved physiological conditions" makes an inaccurate generalization about growth and survival benefits associated colder waters. It is true that in excess of some maximum temperature (e.g. 68F) growth and survival will decline rapidly, but generally growth and survival is enhanced at warmer temperatures which lie below this critical threshold.
- 51. Page 179, 1st paragraph Beginning of first sentence should read "Some water temperature data that DWR collected from the High Flow Channel of the Feather River..." It is true that some potentially stressful temperatures were observed, but it needs to be clarified that was not a typical condition in the High Flow Channel and especially not in the Low Flow Channel. Also, 2nd sentence should be revised to include angling pressure and over-crowding as contributors to observed high pre-spawn mortality.
- 52. Page 180, 1st full paragraph, last sentence This sentence criticizes the "protracted" timeline for implementation of facility modifications, but fails to provide specifics or support for this assertion.

- The facility modification timeline defined in the Settlement Agreement reflects the best judgment of the scientific and engineering collaborative. Premature implementation of a facility modification action could result in poor performance and significant waste of time and resources.
- Page 180, 3rd full paragraph To clarify, minimum flow requirements in the High Flow Channel would not change with implementation of the proposed action. Additionally, operations are not expected to change the frequency and magnitude of flow fluctuations. Therefore, the frequency with which green or white sturgeon could ascend Shanghai Bench would not be altered under the proposed action.
- 54. Page 183, 1st line from top of page This sentence should be changed to read "...within the primary zones of all bald eagle nest territories."
- 55. Page 183; 3rd full paragraph, line 3-5 The second sentence should be changed to read "..., proposed activities at all territories would be reviewed by FWS and DFG. Additionally USFS, BLM, and PG&E would review proposed activities affecting bald eagle nest territories on their respective lands."
- Page 183, 4th full paragraph, 4th line Informal consultation and the Biological Assessment did not stipulate any time limits on construction-related activities related to wintering bald eagles. Further, none are required for the highly mobile wintering population. The second sentence should be deleted or corrected.
- 57. Page 183, 3rd line from the bottom of page This should be changed to read "...during habitat surveys..."
- 58. Page 184, 2nd full paragraph, last line To clarify, April 15 through July 31 is the waterfowl brooding season. The nesting season is earlier.
- 59. Page 185, 3rd full paragraph, 8th line Neither USFWS, DWR or the Biological Assessment suggests that herbicides cannot be used within GGS habitat. Herbicide use will be essential to control purple loostriefe which infests GGS habitat and out competes native plant species. Likewise, within the Biological Assessment, rodenticides use is limited but no restrictions are placed on other pesticides. Staff should correct this statement.
- 60. Page 185, 4th full paragraph With incorporation of conservation measures, the Project is not likely to adversely affect GGS. Change end of last sentence to "...project is not likely to adversely affect the giant garter snake."
- 61. Page 186, 3rd full paragraph, 6th line DWR strongly disagrees that the project would be likely to adversely affect California red-legged frogs, and notes that Staff provides no basis to support this assertion. The last sentence of paragraph should be changed from "...proposed project may be likely to adversely affect..." to "...proposed project is not likely to adversely affect..."
- 62. Page 187, 2nd full paragraph, 10th line This should be changed to read "Sedimentation would be further minimized by road surfacing road retirement, and by current sediment trapping."
- 63. Page 187, last line at bottom of page While DWR does not expect USFWS to prohibit earthmoving or herbicides, they have placed limitations on both in the Draft BA.
- 64. Page 188, 1st full paragraph and page 189, 3rd full paragraph DWR disagrees strongly with Staff's unsupported conclusion that the project may be likely to adversely affect Conservancy fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp. As a result of DWR's existing and proposed vernal pool conservation measures, the last sentence should be changed from "...proposed project may be likely to adversely affect..." to "...proposed project is not likely to adversely affect..."

- 65. Page 190, 3rd and 4th paragraphs The reference to Section 5.2 is incorrect, and instead should refer to Section 5.1.
- 66. Page 192, last full paragraph, 2nd sentence Staff notes there are "several miles of dirt roads, logging roads, and four-wheel drive tracks and trails" in the Plumas National Forest. The Plumas National Forest Plan reports "PNF facilities include 3,700 miles of system roads and 1,200 to 2,000 miles of un-inventoried low standard roads."
- Page 195, 2nd full paragraph, 2nd sentence The average annual drawdown averages more than "50 feet" -- it averaged 112 feet from 1990 to 2002; although drawdown usually ranges from 50-75 feet during peak recreation season, the top of this annual range is not always from a "full" (900') pool elevation so the resultant drawdowns can seem to be of greater footage. (data reported in Study R-3, pp. 5-3 and 5-4).
- 68. Page 197, Table 42, 2nd-from-bottom item To clarify, only the boat-ramp portion of the Enterprise Area is closed when water elevation falls below 830'.
- 69. Page 200, Table 42 Several references are made to the "Feather River Nature Center" in the DEIS (pages 200, 208, 346, etc.). FERC Staff appears to believe that DWR has responsibility or significant affiliation with this facility, but DWR does not. The Nature Center is outside the Project boundary, although the Sewim Bo Trail does emanate/terminate near the Center.
- 70. Page 200 Table 42, approx middle of page Only 8 of the 10 South Forebay picnic sites are accessible (edit "Capacity" column).
- 71. Page 201, Table 42, 2nd line item Should add that DWR also provided an information/interpretive panel at the Model Aircraft Flying facility.
- 72. Page 202, Figure 16 Delete "Camp Area G" from middle-bottom of figure. Camping was prohibited in this area in 2003, because of safety and access concerns.
- 73. Page 203, 4th full paragraph Enterprise is not a "Car-top Boat Ramp." Though access there is free, only the other five named are actually termed "Car-top Boat Ramp."
- Page 205, last paragraph, last line, extends to top of Page 206 The "sunset to sunrise" speed limit mentioned is for Lake Oroville, not Thermalito Forebay. Therefore, delete everything after "... (and by signs on the shore)" and replace with the sentence, "The South Forebay recreation area, and the water surface, is open for day-use only."
- 75. Page 207, end of 6th line from top of page Suggest changing "dispersed" to "undeveloped" because the area available for camping is delineated by signs.
- 76. Page 207, 1st full paragraph, last line "OWA" should be changed to "Project," or "Project, including the OWA" to correctly describe the scope of DFG's responsibility.
- 77. Page 207, 2nd full paragraph, last sentence Add "currently" after "No user fees are..."
- 78. Page 207, middle of 3rd full paragraph The clause in parentheses should be deleted; hunting for all species (including deer) is allowed in OWA. (Deer hunting is prohibited in LOSRA.)
- 79. Page 207, 3rd full paragraph, 11th line Horses are allowed within the OWA on: (1) roads open to vehicles, and (2) within 25' of any OWA "exterior boundary fence."

- 80. Page 208, 2nd line from top of page The words "enters the OWA" should be replaced with "joins the Thermalito Afterbay outlet"; otherwise, the sentence does not accurately reflect the relationship between the river and the Project boundary.
- 81. Page 208, 2nd full paragraph, 1st sentence Delete "River" inside parentheses from "Sewim Bo River trail" (not part of name of trail); note that the Feather River Nature Center is not part of the Project.
- 82. Page 208, 4th full paragraph, 2nd sentence Add "(and the Feather River Nature Center)" after "Much of this trail..."
- 83. Page 208, last line at bottom of page Replace "Complex" with "Forebay and Afterbay"
- 84. Pages 209, 210, and 211, Figure 17 The title at the bottom of each of these 3 pages should be "Lake Oroville Area Trails."
- 85. Page 211, Figure 17 page 3 of 3 The Bidwell Canyon Trail is significant enough in its own right, and probably should not be depicted as an "Other Trail."
- 86. Page 212, Table 43, 1st line under subheading "Trails" Add footnote "e" in 3rd column (or create new Footnote "h" at the bottom of page 213) -- we propose to allow equestrians on all of the Bidwell Canyon Trail.
- 87. Page 212, Table 43, 7th line under subheading "Trails" Delete "Unknown"; the Sewim Bo Trail is associated with approximately 25 parking spaces (2 ADA spaces), 0 restrooms, and 0 trash receptacles. (Nearby facilities meeting these needs are associated with the Feather River Nature Center, outside the Project boundary.)
- 88. Page 212, Table 43, 8th line under subheading "Trails" Delete "Unknown"; OWA Trails have 0 restrooms and 0 trash receptacles.
- 89. Page 215, 4th full paragraph Item (3) says "some recorded use could have been attributed to animals because of improper instrument height." This statement gives the wrong impression that the instruments were installed incorrectly. It would be more accurate if it stated "... attributed to animals where specific field conditions required an installation of instruments close to the ground." The last sentence should say "... even though some visitors also engaged in other activities..."
- 90. Page 216, 1st full paragraph, 2nd sentence Suggest adding the following to more accurately describe the change in trail use designation: "DPR changed some of the hiking and equestrian-use only trail designations, and some of the hiking and bicycle-use only designations, to multiple-use in 2002."
- 91. Page 216, 1st full paragraph, 6th sentence Suggest adding the following to more accurately describe the change in trail use designation "... the Commission denied DWR's request pending the results of the ALP, and this action returned the trails to their original designations."
- 92. Page 216, Camping and Other Overnight Use paragraph Should append the following to the paragraph: "However, most campers engaged in other activities, like boating, fishing, and trail use."
- 93. Page 216, Other Recreational Uses, 2nd paragraph Last part of last sentence is incorrect in that recreational surveys did not occur in the remote areas of LOSRA where hunting is permitted. A more correct statement would be "...because there is little land available for hunting within the generally narrow band of the LOSRA surrounding the lake. Most hunting would actually occur on adjacent public and private land."

- 94. Page 218, first full paragraph, last sentence This sentence appears to refer to a parking area mostly used by walk-in users of Parrish Cove. The actual paved overflow lot would be more correctly referenced by deleting "gravel" and replacing "before" with "near".
- 95. Page 218, 2nd full paragraph (Camping" subheading), first sentence Replace "Average of campgrounds . . ." with "Average occupancy of campgrounds . . ."
- 96. 3.3.6.2 Environmental Effects, Page 223, first 5 lines from top of page Staff discusses the March 2006 RMP and the role of the Recreation and Socioeconomics Work Group and other stakeholders. A suggested clarification is that the January 2005 RMP was largely based on the work of the Recreation and Socioeconomics Work Group, which was further developed through settlement negotiations resulting in the March 2006 SA-RMP.
- 97. Page 226, 4th full paragraph, last sentence Change "DWR" to "DPR" because DPR sets fees in LOSRA.
- 98. Page 226, last paragraph The annual pass for launching/parking at Lake Oroville (includes similar privileges at about 95 other State Park units) was lowered to \$165.00 in January 2006 (no longer "\$200"). The pass at Shasta Lake is not "similar" in that it does not allow access to other reservoirs/lands/facilities.
- 99. Page 226, footnote 77 The new MOU between DPR and DWR will not be finalized until the terms of license issuance are clear; it is proposed to be added as an Appendix to the Final RMP.
- 100. Page 229, 1st full paragraph References to "annual" reporting are incorrect. The SA-RMP (Table 7.3-1, and related text) proposes "biennial" reporting to FERC and the RAC, the same frequency established by FERC in 1994 and followed currently.
- 101. Page 230, 1st full paragraph, 2nd sentence Suggest adding to end of sentence, "(if/when Butte County signs the Settlement Agreement)" for accuracy.
- 102. Page 231, 1st full paragraph, 2nd sentence Add "Lake" before "Oroville Visitor[s] Center..."
- 103. Page 235, Table 46 Should add "Roy Rogers Trail" in Facility column; should say "Change trail designation on a short reach of this trail to allow bicycles to access the Loafer Creek Campground from the Saddle Dam trailhead, without encroaching in the vicinity of the Loafer Creek Equestrian Campground" (in Improvement or Measure column); also add "Meet visitor needs, access" in Purpose/Comments column.
- Page 237, 4th full paragraph and page 240, 4th full paragraph With respect to the suggestions by Pathfinder Quarter Horses et al. regarding providing lighting in the parking area and creating designated, hardened areas for tying horses, Staff should note that the Lakeland Boulevard and Saddle Dam trailheads are day-use areas where overnight use and parking is not appropriate. These day-use only sites are open from dawn to dusk, so use after dark is discouraged. DWR has already improved the sites with hitching posts for horses; "tying horses to trees" in these areas is prohibited by California Public Resources Code Section 4359(b). The existing restrooms are adequate for current and projected future use, and are typical of non-beach type day-use areas. The statement that "no restrooms are available" (at Lakeland Boulevard trailhead) is inaccurate -- there is a "porta-potty" maintained there by DWR. In addition, a new (accessible) vault restroom is proposed for the nearby new Diversion Pool (Lakeland Boulevard) day-use area proposed in the SA-RMP.
- 105. Page 238, 1st full paragraph The premise that "equestrian use is typically higher in the off-season" is not completely borne out by 2001-2004 use data. Some peak use occurs in April, but has shown an increased level in the fall only once (2002). Nevertheless, the SA-RMP already

- includes monitoring protocols and triggers that reflect this pattern (APR-MAY, SEP-OCT; SA-RMP Table 7.3-1).
- 106. Page 244, Table 50, 10th (last) line of "Existing Trails" Footnote "f" should also be added to the Potter's Ravine trail in the "Current Allowable Uses" column.
- 107. Page 244, Table 50, 3rd line of "Proposed Trails" In the "Current Allowable Uses" column, replace "Proposed, not yet constructed" with "Closed to Public."
- 108. Page 245, 2nd full paragraph, lines 3 and 4 The two citations here are DPR publications. On these two lines, change all 4 occurrences of "DWR" to "DPR" (these are correct in Section 6).
- 109. Page 245, last full paragraph Staff mentions 37 comment letters in one sentence, then refers to these comment letters in the following sentence stating "key concerns raised in these 27 filings . . ." DWR believes Staff meant either 37 or 27 and simply made a typo in one sentence or the other.
- 110. Page 247, Figure 18, Page 2 of 2 The legend and depiction of the Bidwell Canyon Trail (from Saddle Dam trailhead north several miles) is incorrect. This trail is "proposed multiple use" (proposed to be opened to equestrians, it is currently open to hiking and bicycling only).
- 111. Page 248, footnote 81 It is misleading to report the Beebe trail was "designed" this way. It was constructed in this fashion, owing not to "design" but due to circumstances and constraints at the time and since. DWR suggests replacing with "designed" with "constructed."
- Page 248, footnote 82 DWR believes it is more appropriate to use the guidelines developed by DPR. With respect to the last sentence of this footnote, DWR/DPR conforms to such signage.
- 113. Page 249, 5th full paragraph, 3rd line Should change "bicyclists" to "bicyclists/hikers only"; the comparison between sections of trail is otherwise misleading.
- 114. Page 249, 6th full paragraph, 1st sentence (and footnote 83) Change "policies" to "goals and recommendations" (as cited in February 25, 2006 letter from the Chair of the California Recreational Trails Committee).
- 115. Page 250, 3rd line from top of page Add "and access" after "trails..."
- Page 250, 2nd full paragraph, 3rd sentence It is incorrect and misleading to state "equestrians and bicyclists do not share trails..." They do so successfully in many places, including substantial lengths of many Project trails; and throughout the U.S.
- 117. Page 250, 2nd full paragraph, 2nd-to-last sentence The majority of the hiking/biking trails are not "paved" in this area -- they are unpaved (often gravel roads, such as around Thermalito Afterbay).
- 118. Page 250, last paragraph Note that this nominated Interim Project was dismissed because of its complexity it did not meet the screening criteria of the Interim Projects Task Force.
- 119. Pages 250-251, Staff Analysis Section DWR needs to acquire right-of-way which is outside the Project boundary for the demonstration mountain bicycle trail. These obstacles have a bearing on the timing for development of this trail. Furthermore, the SA-RMP proposes that DWR will investigate the feasibility of constructing a new 2-4 mile trail. Actual construction is contingent upon topographic, jurisdictional, and ownership/easement constraints. If feasible, it will be constructed, possibly with some Supplemental Benefits Funds for trail segments outside the Project boundary. DWR and Settling Parties recognize this trail may not be feasible at all. In this same paragraph, the need for "physical changes" to the trail is overstated. Also, such changes are hardly "permanent" (that is why we have to maintain trails and adjacent vegetation).

- 120. Page 251, 3rd full paragraph, 1st sentence Staff's premise here is incorrect. The actual premise is that many users wanted more access (both bicyclists and equestrians).
- 121. Page 251, 3rd full paragraph, 3rd sentence The statement "...regional demand data indicate bicycling is increasing in popularity" does not adequately express the regional recreation demand data that is germane to trails in the Project area, nor does it provide the basis for comparison with demand for equestrian use of trails. In addition, the regional data that was available at the time of the relicensing studies had several major limitations in terms of the geographic basis for the data and activity definitions. That data has been recently supplanted by data that provides information with a geographic basis that is much more representative of the Project Area, and that provides a much stronger basis for demand conclusions.

In relicensing study R-12, two sources of regional demand data were used to project demand for recreation activities in the Project area. Data from the National Survey of Recreation and the Environment (NSRE) reported by Cordell (1999), showed similar moderate future demand for "biking" and "horseback riding". However, the data were for the entire Pacific region, which included California, Oregon, Washington, Alaska, and Hawaii; further, these activities were broadly defined to includes all types of biking and horseback riding, not only the mountain biking and horseback riding on trails that are the dominant types of "biking" and "horseback rid ing" in the Project area. The second source of demand data was a statewide California survey, which indicated moderate latent demand for horseback riding, but also included "horse shows and events" in the activity definition and included all types of riding, not just trail riding. Latent demand was indicated to be lower for bicycling, but the activity was more narrowly defined as "bicycling on unpaved surfaces and trails, mountain biking."

In August 2006, results were published from the most recent NSRE surveys based on survey responses from Butte County and 24 surrounding counties in northern California and western Nevada (these counties represent the "local area" for the Plumas National Forest, which is adjacent to, and overlaps slightly, the Project area). Most germane to the issue of demand for various types of trail use in the Project area are data that indicate more than triple the percentage of people 16 years of age and older in the 25 county area participate in "mountain biking" as compared to "horseback riding on trails" (28.3 percent vs. 8.6 percent). Although latent demand data for the 25 county area are not yet available, this participation data suggests a substantially higher level of demand is likely to exist for bicycle access to trails as compared to equestrian access. As stated elsewhere, the intent of the trail designations in the proposed Trails Plan, is to expand trail use opportunities for both equestrians and bike riders.

122. Page 251, 3<sup>rd</sup> full paragraph, 7<sup>th</sup> sentence – The statement that "...there may be only slightly greater demand for more bicycle trails than equestrian trails" is based on an incomplete interpretation and understanding of the survey results presented in Table 51 (p. 252). The survey data in Table 51, which duplicates data presented in relicensing Study R-13 report, appear to indicate a moderate level of demand (about 20-40 percent stating "too few") for additional unpaved bicycle trails and equestrian trails in several of the six sub-areas of the Project area. However, it should be understood that at each of the six sub-areas, less than 10 percent of the survey respondents were participating in mountain biking or horseback riding during their visit. (The exception is the 60 percent of survey respondents at the Diversion Pool who were horseback riding during their visit (Study R-13 report, Table 5.1-8)).

The substantially higher percentages of respondents indicating a desire for more bike or equestrian trails than were actually using the trails for those purposes are probably an inflation of actual demand. The response probably reflect, at least in part, a tendency for some respondent to check "too few" for most or all of the 27 facility types listed on the survey form. An indication of this tendency is the high number of facility types for which 25 to 40 percent of respondents checked "too few" on the survey form, whether the category was trail, camping, boating, fishing and hunting, or other types of facilities. (For this reason, the interpretation of this data is the Study R-

13 report highlighted sub-areas where a 50 percent of more of respondents felt the number of a certain type of facility was "too few" and sub-areas that showed consistently higher percentages of "too few" responses than the other sub-areas.) It is particularly of note that a uniquely opposite pattern occurs in the data shown in Table 51 in relation to demand for equestrian trails at the Diversion Pool, where the greatest demand for more equestrian trails would appear to exist: although 60 percent of those surveyed at the Diversion Pool were horseback riding on the trails during their visit, only 43 percent believed there were "too few" equestrian trails.

- 123. Page 251, end of last paragraph It is incorrect to state that "most" equestrian-only trail "elimination" would occur here. In fact, only about 4-5 miles of trails to be converted to multipleuse are associated with the Diversion Pool. Consistent with Staff's observation of "demand," DWR proposes to open a nearly equal length of trail to equestrians in this area (Burma Road/Freeman Trail).
- 124. Page 252, 1st full paragraph, 1st sentence Add ", upon recommendation of FERC Staff' at end of first sentence.
- 125. Page 252, 1st full paragraph, 2nd sentence Add at end or after, "The Commission recommended that the ALP was the appropriate forum to address these issues."
- 126. Page 252, 1<sup>st</sup> full paragraph, 4th sentence Available data do not support the statement that "...there is almost equivalent demand for equestrian and bicycle trails at the project", particularly the recent NSRE data described in the response above that indicate more than three times as many people in the region participate in mountain biking as participate in horseback riding on trails.
- 127. Page 252, 2nd full paragraph, 2nd sentence DWR believes the numbers of deterred equestrians are negligible, and the claims perhaps even false. See below the clarifying information on the trails surveys conducted
- 128. Page 252, 2nd full paragraph Note that most data errors tended to overstate visitation and the assumption that use might have been measurably different during the study period is unreasonable. The "proportional trail use data" were, in part, based on survey responses (not infrared trail counters).
- 129. Page 252, 3rd full paragraph, 2nd sentence It is misleading to imply that "three disconnected trail sections" is significant. The connections between these trail segments are short, not unlike a section of shared trail that exists here under current conditions.
- 130. Page 252, 3rd full paragraph, 3rd sentence It is incorrect to state that short, paved sections are "unavailable" to equestrians. DWR retained equestrian access over the paved Oroville Dam at equestrians' request; while paved areas are not ideal, they are tolerable (and used) in short lengths.
- 131. Page 252, 3rd full paragraph, 2nd-to-last sentence It is not accurate to claim or believe that "equestrians would need to travel over the spillway." They are allowed here at their request, but have the option of using the Beebe Trail (instead of the Freeman Trail) if their intended destination or route was south of Oroville Dam.
- 132. Page 252, 3rd full paragraph, last sentence This sentence is incorrect. A loop trail opportunity would be created for equestrians because the proposed action includes opening Burma Road (Freeman Trail) to equestrian use in this part of LOSRA.
- 133. Page 252, 1st line at bottom of page Suggest replacing the words "be able" with "elect"
- 134. Page 253, 1st line from top of page This sentence is incorrect. Bicyclists would be able to connect to the Freeman Trail there are short connecting sections of trail at the ends of the Sycamore Hill segment (too small to resolve on map).

- 135. Page 253, 1st full paragraph Note that DWR has completed Study Plan W3 (Phase 2) that evaluates these resources, and monitoring of trails and erosion will continue as proposed. This report was finalized after the license application was submitted and will be filed prior to is suance of the Final EIS. Furthermore, DPR reviewed the condition of all LOSRA trails in 2006 for maintenance needs.
- 136. Page 253, 2nd full paragraph, 1st sentence The "case histories" cited are exaggerated and not directly relevant to Project trails. The Project has a documented, safe history with respect to trail user safety, including a period of multiple -use designation during relicensing Studies. DWR disputes any assertion that its data are inadequate.
- 137. Page 253, 2nd full paragraph, last sentence DWR is not aware of "equestrians with disabilities" encountering problems on Project trails, and believe that implementation of the Trail Plan as proposed in the SA-RMP will retain ample resources (several trail miles, including a loop associated with the accessible campground) for this user group.
- 138. Page 253, 4th full paragraph, last sentence DWR believes the current DPR Trails Handbook (and related guidelines) provides a reasonable "consistent measure" for managing Project trails. When and if these standards are superseded, it will be appropriate to follow them, but waiting for their uncertain development is neither warranted nor reasonable.
- 139. Page 253, 5th full paragraph Note that the legislation cited was repealed in 1974 (same citation). The citation makes no mention of the Beebe Trail, and we believe FERC Staff was given false information about the relationship of the Beebe Trail to the 1944 legislation. The Dan Beebe trail was surveyed for development by DPR employees Nolan Albright and Mike Doyle in 1960 or 1961 (T. McBride, pers. comm.).
- 140. Page 253, 6th full paragraph, last sentence It would be relevant to clarify/add here that FERC Staff could neither find evidence that the trail exists from, or was constructed because of, 1944-era legislation.
- 141. Page 257, 1st full paragraph Add to the end of last sentence, "...and the Trails Plan proposed in t the RMP with provisions for additional multiple -use trails."
- 142. Page 258, footnote 88 Add at end of footnote, "(if a signatory to the Settlement Agreement)."
  Per SA-RMP page 4-18: "All members must be Settlement Agreement signatories."
- 143. Page 259, 4th full paragraph Sentence is not clear; suggest changing "to" to "and" (or omit first occurrence of "would").
- 144. Page 259, middle of 6th paragraph Note that expectation of "improving angling opportunities" is contingent upon future angling regulations, which are outside the control of DWR and FERC.
- Page 260, 1st full paragraph Angling closures may result from seasonal operation of the weirs also, as well as from the installation.
- Page 260, 1st full paragraph, last sentence The "temporary adverse effect" could be locally permanent, depending on future angling regulations (which are outside the control of DWR and FERC).
- 147. Page 260, 3rd full paragraph For clarity, change "to support" to "which supports" (the purpose of the "600-cfs" release is not "kayaking and floating.").
- 148. Page 260, 4th full paragraph, 4th sentence This sentence does not seem to make sense. It is not clear what difficulty Staff refers to here.

- Page 260, 4th full paragraph, last sentence Suggest changing "these" to "few" and delete second "not."
- 150. Page 260, 5th paragraph, 2nd-to-last sentence Suggest changing "retains" to "retained."
- 151. Page 260, 5th paragraph, last sentence DWR does not believe the proposed flow increases (i.e., +100 cfs baseflow, +200 cfs during spawning period and potentially up to 900 cfs for temperature control purposes) should be characterized as "minimal."
- 152. Page 263, 1st full paragraph For geographic name consistency, note that "Mile Long Pond" is the same as "One Mile Pond," and some Relicensing documents (including the DEIS) may use both interchangeably. The latter is more conventional and, for clarity, probably should be used here.
- 153. Page 264, 1st line from top of page Staff suggests it would be more efficient to re-evaluate the OWA plan every 6 years. DWR believes it may be more practical to coordinate schedule with DFG required updates. Otherwise we may have multiple plans in place for the same area at the same time. DFG has a 2-3 year cycle for regulation changes, so DWR suggests using this shorter recurring period which could also then coincide with the DEIS suggested 6-year period.
- 154. Page 264, 2nd full paragraph, 2nd line Delete "...and OWA". There are no pools in OWA outside of the afterbay.
- 155. Page 264, 2nd full paragraph, last sentence Suggest changing "some" to "most" ("vehicle" use is prohibited in "most" areas, OHV use is prohibited in "all").
- 156. Page 264, 4th full paragraph, 1st sentence Note that other bald eagle territories are partially-within the project boundary. Potter Ravine bald eagle nest territory has been abandoned during the last 2 nest seasons.
- 157. Page 265, line 8 from top of page Suggest changing "eliminating" to "reducing" (dog-trials may still occasionally be allowed in certain locations of the Project under Special Use Permit).
- 158. Page 266, 7th paragraph, last sentence Should clarify that this refers to "boat-in campgrounds"
- 159. <u>3.3.6.3 Unavoidable Adverse Effects</u>, Page 267, 2nd full paragraph Planting activities do not usually interfere with recreationists or their activities. However, DWR suggests adding a paragraph identifying brood pond construction as a unavoidable short term adverse impact to afterbay recreation as the afterbay water surface elevation will need to be draw down to allow construction for an extended period.
- 160. <u>3.3.7.1 Affected Environment</u>, Page 271, Table 53, 1st line item Note that the term of this lease has been extended/renewed.
- 161. Page 272, 3rd full paragraph, 4th line To clarify, DFG has never managed fish and wildlife habitat of LOSRA. Further they have done no habitat management of the OWA for several years.
- 162. Page 275, 1st full paragraph DFG does not regulate this land use. They are DWR leases regulated by DWR.
- 163. 3.3.7.2 Environmental Effects, Page 277, 2nd full paragraph, 4th line Suggest changing to read "... DWR in cooperation and coordination with DFG proposes to develop and implement a management plan for the OWA."

- 164. Page 278, last paragraph Potter Ravine bald eagle nest territory has been abandoned for the last 2 nesting seasons.
- Page 279, Fuel Load Management Clarification that Proposed Measure B102 is not mutually exclusion of the Forest Service's 4(e) condition. The Fuel Load Management Plan for Project lands under B102 will include Forest Service lands consistent with Forest Service's 4(e) condition.
- 166. <u>3.3.8.1 Affected Environment</u>, Page 283, 1st full paragraph, last sentence The public report for archaeological and historical resources is mentioned but a public report on the ethnographic inventory (Prepared by Far Western Anthropological Group) that was prepared is not mentioned and should be noted.
- 167. Page 283, 4th full paragraph, 2nd sentence "Pinton" should read "Pinto."
- 168. Page 284, 4th full paragraph, 1st line DWR is unsure what is meant by the phrase "a more temporally cultural chronology."
- 169. Page 286, 4th full paragraph, 8th line Suggest removing the semi-colon (";") between "Maidu" and "were."
- 170. Page 286, 4th full paragraph, 11th line It should be noted that the Round Valley Reservation is in Mendocino County to give the reader some perspective about how far the American Indians were forced to walk.
- 171. Page 287, 2nd full paragraph, 14th line This reference to the "Lava Beds District," suggests something more formal than it was, as reported in the historical record. Mining districts were formally established in the region, as were certain community districts, and the Lava Beds did not match either of these concepts. It was simply a geographical area south of Oroville. This should be reworded to more accurately indicate that it was an area known as the Lava Beds.
- 172. Page 288, 2nd full paragraph 5th line After ... "900 feet", it should read "above msl".
- 173. Page 290, 1st full paragraph, 1st sentence Reference to the curation facility in the first sentence should be corrected. DWR is committed to establishment of a curation facility in the Oroville area. DWR is supportive of and is encouraging management with or by the Tribes, but the latter is not required, as implied in current text.
- 174. Page 290, 3rd full paragraph, 5th line This paragraph lists many areas that currently are used for recreation and maintenance, etc. that were included in the archaeological survey. Two areas of considerable cultural importance that were surveyed, but are not listed, are Enterprise boat ramp and the Foreman Creek recreation area. Both locations should be identified here. The list also identifies the Bloomer boat-in campground but not the other boat-in campgrounds at Foreman Creek, Craig Saddle and Goat Ranch; all of which were surveyed. It would be better to list them all or simply include "all boat-in campgrounds."
- 175. Page 290, 4th full paragraph, 5th line Add a comma (",") between "scatters" and "caves."
- 176. Page 291, 1st full paragraph, 5th line Should change "new" to "near."
- 177. Page 292, 1st full paragraph, 3rd line Insert "can" between "lines" and "be."
- 178. Page 292, last paragraph, 2nd line The reference to the "Konkow Tribal groups" in this sentence may be misconstrued as the Konkow Valley Band of Maidu. It would be more accurate to say "local Konkow Maidu Tribal groups."
- 179. Page 292, last paragraph, 7th line Remove "and" at the end of the line between "as" and "the."

- 180. Page 293, 1st line at top of page The accurate reference for the Mechoopda Tribe is "Mechoopda Indian Tribe of Chico Rancheria". Since complete titles are provided for the other tribes, Mechoopda should be referred to in the same manner.
- 181. Page 293, 2nd full paragraph, 2nd line A definition for the APE is provided on page 282. It is accurately defined as the Project 2100 boundary for archaeological resources and the fact that the APE was expanded for ethnographic resources is noted. With this in mind, the APE mentioned here should be better identified. DWR suggests that it should read "the Project 2100 boundary APE" or something similar.
- 182. Page 294, 2nd line from top of page Correct the spelling of "Foreman."
- 183. Page 295, 1st full paragraph, 5th line "table 52" should actually be "table 60."
- 184. <u>3.3.8.2 Environmental Effects, Historic Properties Management Plan</u>, Page 297 This discussion contains two errors:
  - 1) Although the three federally recognized tribes in Oroville were invited to be involved in the development of the HPMP, the Tribal Unity Council, per se, was not involved.
    2) Mechoopda is a federally recognized Tribe.
- 185. Page 297, 1st bullet Members of the California Archaeological Site Stewardship Program will assist DWR with the monitoring sites; they will not be doing all of that work. This is noted on page 4-3 of the draft HPMP.
- 186. Page 297, 1st bullet Insert "assisted" between "monitoring," and "by."
- 187. Page 298, 3rd full bullet, 3rd line This should read "within Lake Oroville".
- 188. Page 298, 6th full bullet, 2nd line Remove "and" at the very beginning of the line.
- 189. Page 299, 6th full paragraph, 6th and 7th lines It is stated here that DWR is subject to the requirements of the Native American Graves Protection and Repatriation Act. This is not an accurate statement; DWR is not subject to NAGPRA (NAGPRA). Archaeological studies conducted prior to and during dam construction were completed under the auspices of the Department of Parks and Recreation (DPR). All human remains and items of cultural patrimony removed from within the Project 2100 boundary at that time have been and are currently curated with DPR. DPR has full responsibility for these NAGPRA issues and has abided by the regulations for NAGPRA. DWR has worked to assist the Tribes with repatriation of remains and materials taken from sites during dam construction.

Other elements of NAGPRA apply to the discovery of human remains specifically on federal and tribal lands. Federal land holdings within the Project 2100 limits are under the jurisdiction of the BLM and the Forest Service. Those agencies, however, have not delegated NAGPRA responsibilities for those properties to DWR. There are no tribal lands within the project APE.

- 190. <u>4.1.1 Economic Assumptions</u>, Pages 335-340 FERC appears to have calculated these values by using 500 MW for dependable project capacity while 100 MW would more appropriately reflect power the Project could make available regularly to CALISO. More importantly, FERC's assumption overstates the net project benefits because the ancillary services benefit is also counted in FERC's levelized benefit analysis.
- 191. Page 335, Table 68 and Page 340, Table 71 Table 68 on page 335 shows a value for dependable capacity of \$51,600/MW and cites CEC as the source. This value seems reasonable when applied to actual capacity delivered, but it would not be appropriate to apply this value to "dependable"

capacity." Since the Oroville Facilities operate under significant constraints associated with water delivery and environmental compliance, the installed plant capability does not have the same value as other, non-constrained hydropower plants in California. In fact, DWR derives no benefits from dependable capacity associated with the Oroville Facilities; therefore, dependable capacity should not be used to calculate annual benefits in Table 71 on page 340.

Capacity benefits are, however, an integral part of the total annual value of the project, and are reflected in DWR's analysis in our license application. They are stated as "Capacity and Ancillary Services Value" (\$5,218,000, or roughly \$51,150/MW assuming 102 MW of capacity credit on average for the five-year period covering 1998 through 2002) in Chapter 6 of the PDEA accompanying our January 2005 license application. This value is also shown in Table 6.4-2 of our June 28, 2006 submittal to FERC providing updated cost tables for the preferred alternative, which is the Settlement Agreement.

Power production from the Oroville Facilities is heavily constrained by the complex rules for water releases that include flood control, delivery requirements to local FRSA water rights holders, the myriad of environmental protection/mitigation measures, and SWP exports. Therefore, it would not be correct to assign value to the capacity of the Oroville Facilities as though they had the same flexibility as a stand-alone hydropower plant.

- 192. Page 339, Table 70 This Table shows only \$11,830,000 for Annualized Cost of PM&Es for the SA Alt (NOTE: this is <u>above</u> the amount stated for the No Action Alt, which was \$10,016,000, so the Total PM&E's under the SA Alt would presumably be \$11,380k + \$10,016k = **\$21,846k**). By comparison, we cited a total of **\$25,327k** in our June 28th Cost Table submittal to FERC.
- 193. <u>4.3 Comparison of Alternatives</u>, Page 340, Table 71 Table 71 lists a figure of \$25,800,000 for "value dependable capacity." Again, this value appears to be overstated, and overlaps with the capacity value appropriately included in the next line in the table that is "value ancillary benefits" (see comment on Section 4.1.1 above). Furthermore, this value appears to be derived from multiplying the \$51,600/MW value from Table 68 to a dependable capacity amount of 500 MW. As stated in Schedule A of our AIR response dated May 26, 2006 we consider the dependable capacity of the Oroville Facilities to be about 300 MW based on 1 in 20 hydrologic conditions, and this is only for the purposes of running CALSIM simulation modeling to support ongoing energy portfolio studies, not for determining value of a specific system resource. The 1976-77 operational water year was the driest on record for the Oroville Facilities and the dependable capacity under these conditions is about 100 MW.
- 194. Page 344, Item 9 The DEIS states, "Alternative water temperature objectives at least as restrictive as DWR's proposal could be developed as part of this program." The word "restrictive" should be changed to "protective" because "protective" more accurately captures the intent of improving conditions for the fish.
- 195. Page 344, Item 10 The DEIS states that a disinfection system should be installed if fish are passed above the hatchery. The word "fish" should be changed to "anadromous salmonids." Fish are passed above the hatchery right now, in the form of recreational fish stocking: rainbow trout in the Forebay, Coho salmon in Lake Oroville, etc
- 196. Page 344, Item 11 Should be corrected to say..."...September 9 to March 31...."
- 197. Page 345, Item 13 This item needs to be re-worded to make it consistent with the Settlement Agreement language. Suggested edits include: "Meet specified water temperature objectives or operate to minimize their exceedances in the low flow and high flow channels according phased approach. A set of water temperature objectives in the Low Flow Channel would be considered targets up until completion of facility modifications after which they would become license requirements. Another set of water temperature objectives in the High Flow Channel will be evaluated in the proposed post-license issuance feasibility phase to investigate potential future

facility modifications and/or operations. Both the Low Flow and High Flow Channels temperature requirements, once established, will have exceptions for years considered severe dry years under the Oroville Temperature Management Index (OTMI)."

- 198. Page 345, Item 20 OWA plan will include both terrestrial and aquatic resources
- 199. Page 346, Item 29, 1st bullet Name of Visitor Center should be corrected to read "Lake Oroville Visitor Center."
- 200. Page 346, Item 29, 2nd bullet Delete "Feather River Nature Center" and add "South Thermalito Forebay"
- 201. Page 351, last paragraph & Page 352, 2nd paragraph When discussing the side channel creation program (Proposed License Article A103), the last sentence only mentions enhanced spawning habitat. This measure would also enhance rearing habitat which is actually the most important part of this program.
- 202. Page 353, 4th full paragraph Staff states that Coho salmon are an unsuitable replacement for the coldwater fishery in Lake Oroville because they are not a "native" species. Since Lake Oroville is a non-natural feature and the cold water stocking program is an artificial stocking program, the emphasis on "native" species is not warranted. Furthermore, the warmwater fishery in Lake Oroville is based entirely on non-native fishes.
- 203. Page 353, 4th full paragraph Comparison of current hatchery water temperature requirements and those included in the Settlement Agreement indicates that the hatchery water temperature targets in the proposed action are not cooler than those currently provided to the hatchery. However, Table 1 targets would be cooler than the current water temperature requirements at Robinson Riffle, which would result in decreased water temperatures at the hatchery prior to implementation of the facilities modification(s).
- 204. Page 353, 5th paragraph When discussing the FRFH Improvement Program (Proposed License Article A107), the first sentence says the new FRH temperature requirements would provide cooler water for the inland fish stocked in Lake Oroville (recreational angling) and the anadromous fish stocked in the river (simulating natural production). This is not an accurate statement for recreational fish stocking in the reservoir. The current Coho salmon are not raised at the main FRH grounds anymore; rather they are raised at the FRH Thermalito Annex facility on Hwy 99. This is because the warmer water at this location is more protective for these fish, which are susceptible to certain diseases that are more virulent at cooler temperatures. This points out a major fallacy about water temperatures at the FRH that colder is always better. This is not the case.

The DEIS further makes the statement that Coho salmon do not appropriately address the project effects because Coho salmon are not native to this river system. This is misleading because the reservoir fishery is not intended to address the project effects; these effects are addressed by the anadromous hatchery production. The reservoir fishery is actually a recreational enhancement to the project rather than an environmental mitigation. This is often confusing to people. The species used in the recreational fishery are selected based on their recreational value, cost, and in a manner which minimizes potential environmental impacts. The reason Chinook were used in the past was not because they are native species, rather it was because they best met the previously mentioned criteria.

Also, DWR is not clear on how Staff determined the \$371,000 annualized budget for this measure. The annual budget to produce fish at the FRH is closer to \$1.5 million per year, and this does not include monitoring, which will cost at least an additional \$600,000 per year

205. Page 354 – The discussion on Flow/Temperature is inconsistent with the Settlement Agreement. In the 1st paragraph, DWR suggests re-wording the first sentence to say: "DWR proposes to release a minimum instream flow of 800 cfs in the Low Flow Channel during anadromous spawning season (September 9 through March 31) and 700 cfs for the remainder of the year, with a provision to increase this minimum up to 1,500 cfs or the total release to the High Flow Channel whichever is less to meet Table 1 (i.e. Robinson Riffle) temperature objectives."

2nd paragraph – The first sentence is not clear as to what is being compared. It appears to compare the existing condition to pre-Oroville Facilities conditions, which is inappropriate for this analysis. The basis of comparison for the DEIS analysis of the Proposed Action is not pre-Oroville Facilities conditions. It would be more accurate to describe existing conditions in terms of overall habitat availability by life stage compared to individual habitat component availability as was described by the Overall Habitat Suitability Index Value analysis in the PDEA. Specifically, warmer water could reduce the thermal suitability of water for spawning, but reduced water temperatures in locations without suitable depths, velocities, or substrates would not impact the overall quantity and quality of spawning habitat availability.

3rd paragraph – Staff's statement that "We note that even if DWR does not modify their facilities, the lower water temperatures would become requirements thereby helping to ensure that colder water temperatures would exist in the Feather River" is inaccurate. Only the temperature objectives or something as protective at the hatchery become requirements without facilities modifications, In the Low Flow Channel, the temperature objectives become requirements only after one or more of the modifications have been selected and implemented. The High Flow Channel temperature targets may be modified during the feasibility phase of the flow/temperature measure and again after an appropriate testing period.

5th paragraph – The characterization of maximum weighted usable area being provided by the flow regime in the Low Flow Channel and the minimum flows in the High Flow Channel is misleading. Maximum Chinook salmon spawning weighted usable area in the Low Flow Channel occurs close to 800 cfs, but does not take into account other species or other life stages. The characterization of maximum weighted usable area being provided in the High Flow Channel specifically also is misleading because net flows in the High Flow Channel would not change with implementation of the Proposed Action. Also, the term anadromous fish is misleading. Weighted usable area was calculated only for some life stages of Chinook salmon and steelhead, not for sturgeon or lamprey species.

If operations cannot meet water temperature targets prior to implementation of the facilities modifications, DWR is required to consult with the resource agencies to implement management strategies that would best protect the fisheries resources. Providing documentation of those actions to FERC already is a provision of the Settlement Agreement. After facilities modifications are completed, DWR would be required to perform the same measures as those described for actions taken prior to facilities modifications. If water temperature targets cannot be met due to uncontrollable forces, a provision exists in the Settlement Agreement requiring DWR to notify FERC in the case of a single event, and consult with the resources agencies and file a plan with FERC identifying feasible measures to address multiple events.

- 206. <u>5.1.2.4 Terrestrial Resources</u>, Page 356, 4th paragraph The statement that "Overlapping land management jurisdictions for the OWA have resulted in poor management of this area due to conflicting land management objectives" is not accurate. It has resulted in difficulties at time, but DWR disagrees with the characterization of poor management.
- 207. Page 357, last paragraph Lake Oroville should not be included in the statement "We determined that fluctuating water levels in the Thermalito Complex, Lake Oroville and in the Low Flow Channel promote proliferation of noxious plant species along the wetland margins, river banks, and adjacent floodplain." Our studies did not find that noxious weed were a problem in the Lake's fluctuation zone.

- 208. <u>5.1.2.5 Recreation</u>, Page 358, 5th full paragraph Group overnight capacity is approximately 273 (not "115"); this includes group camp people-at-one-time capacity at Loafer Creek (150) and Lime Saddle (48), plus Bloomer Boat-in Campground (75).
- 209. Page 358, 6th full paragraph, last sentence The last activity listed (OHV use) does NOT occur on Project lands; also note that "target shooting" is limited to contracting public agencies and is not an activity available (on Project lands) to general recreational visitors.
- 210. Page 359, end of 3rd full paragraph DWR agrees with Staff's evaluation and proposes to collaborate with DPR to ensure improvement of facility conditions at the Project's boat-in campgrounds early in the License term. However, because of modern requirements for operation of public water distribution and treatment systems, DWR suggests this paragraph not imply that replacement of any water system (presumably at Craig Saddle) is proposed for any such remote areas.
- 211. Page 359, footnote 112 DWR has completed Study Plan W3 (Phase 2), which describes conditions of Project trails in the context of water quality. This report was finished after the license application was submitted and will be filed prior to issuance of the Final EIS. In addition, DPR reviewed trail conditions in 2006, and made recommendations for maintenance to DWR. Appendix D of the SA-RMP states that current maintenance of Project trails is considered good by project visitors (p. D-7), and this information was reported in detail in relicensing Study Plan R13 Recreation Surveys. The SA-RMP reference to assessing and monitoring trail conditions is in Appendix D (p. D-17). DWR proposes to add and elaborate on this information by amending Table 7.3-1 to the Commission's satisfaction. Also note that the proposed Water Quality Monitoring Plan addresses monitoring impacts from trail erosion. As stated therein, it is DWRs intention to address any Project impacts identified therein.
- 212. Page 360, 1st full paragraph, 1st sentence The correct title of SA-RMP Section 7.2 is "Recreation Operations and Maintenance Program."
- 213. Page 360, 1st full paragraph DWR and DPR rely upon DPR's comprehensive Trails Handbook (1991) when establishing and maintaining Project trails. This is included in the SA-RMP (Section 8.0, References), but is erroneously cited as "undated."
- 214. Page 360, 2nd full paragraph, 2nd-to-last sentence Note that DPR's Trails Handbook (1991) is a loose-leaf, Statewide resource; updates have occurred frequently and are ongoing, thus it remains a contemporary and appropriate reference and compilation of guidelines and standards.
- 215. Page 360, 3rd full paragraph DWR is unaware of facility maintenance standards beyond those used in DWR's relicensing study SP-R10 Recreation Facility Inventory and Condition report.
- 216. Page 360, 4th full paragraph DWR proposed the resources provided by the RAC and LCU, such as Public Workshops, contact opportunities provided by the Web-based Bulletin Board, and other interpretive resources are adequate to capture this information. Furthermore, the existence of any such "latent demand" groups is speculative; outreach to other, non-local user groups is more appropriately a marketing activity and not within the scope of the SA-RMP.
- 217. Page 362, 4th full paragraph, end of line 3 Should change "annual" to "biennial".
- 218. Page 362, 5th full paragraph The quoted Butte County's assertion is related to facility capacity and demand, for which the monitoring and trigger mechanisms are appropriate using language crafted with Butte County participation and approval. Butte County's statement is not relevant to Staff's reiteration of monitoring of facility condition.

- 219. Page 364, 3rd full paragraph, last sentence This sentence is misleading. It should read, "Virtually all of the opposing commentators are equestrians, while many of the supporting commentators are bicyclists and most are in fact equestrians." (There are also many Settlement Agreement signatory supportive equestrians including the largest California equestrian organization, California State Horsemens Association, and the largest local equestrian organization, CSHA Region 2.) To use the word "most" to describe both groups implies an equivalence that does not exist.
- 220. Page 364, footnote 115 Contrary to this footnote's claim, the "commenting entities" are not identified in Section 3.3.6.2. Furthermore, in that section it is unclear whether there are 27 or 37 such entities; only the small subset of commenting entities offering "recommendations" are identified there.
- 221. Page 364, 6th full paragraph, 2nd sentence This statement is incorrect: Project bicycle trails are NOT "mainly paved." Very little of the Project's bicycle trail segments are paved.
- 222. Page 364, 6th full paragraph, last two sentences It is misleading to describe only this "notable" change. An equally-notable change and one appropriately mentioned here, is the opening of approximately 12 miles of trails to equestrians where such use has "historically" not been allowed. Though it would result in a "substantial" decrease in the amount of trails where bicyclists could ride without expecting encounters with horses, these areas proposed for enhanced access did safely and successfully convey multiple-use traffic from about 2002 to 2004. Hence the broad support for this change among the settling parties.
- 223. Page 365, 2nd line from top of page Add "if feasible" after "built..."
- 224. Page 365, 1st full paragraph, 1st sentence The Comprehensive Non-Motorized Trails Program does not propose to convert "all" Project trail designations to multiple-use. Furthermore, it is inappropriate to consider the "2004 finding," because the EA supporting that decision bore numerous inaccuracies. In addition, the restoration order itself clearly stated the order was not meant or intended to influence or predispose the efforts ongoing in the ALP to develop a broadly supported new license trails plan. The trails plan submitted in the SA-RMP was truly collaboratively developed and is supported by a majority of the trail users who participated.
- 225. Page 365, 1st full paragraph, 2nd sentence It is incorrect and misleading to deduce that "appeal to bicyclists" is the rationale that DWR (and Settling Parties) used in crafting proposed trail designations. Stakeholder advocates and the Settling Parties included equestrians who seek more loop-travel opportunities and a greater selection of Project trails to access, as well as thoughtful non-users who advocate the best use of the Project's recreational resources.
- 226. Page 365, 1st full paragraph, 3rd sentence DWR disagrees that the data "shortcomings" are accurately and meaningfully described or interpreted in Section 3.3.6.1, and thus DWR does not believe they reflect "questionably" on the proposed Comprehensive Non-Motorized Trails Program.
- 227. Page 365, 1st full paragraph, 2nd-to-last sentence It is inappropriate to unduly rely on the "2004 finding", especially since it was pointed out by other filers that the 2004 EA bore numerous inaccuracies and many of its conclusions were not well supported. DWR chose not to appeal the 2004 EA because of our overriding consideration of a more important aspect of the Commission's finding: that we were directed and encouraged to address this issue in the ALP. In addition, we were relying on the veracity of the restoration order that denied the trail use designation amendment request but added this was primarily in an effort not to predispose the outcome of the ALP and settlement negotiations.
- 228. Page 365, 3rd full paragraph The passage quoted from the SA-RMP refers in part to the internal, ministerial responsibilities of DPR and as such is partially out-of-context. We propose to clarify

- in the SA-RMP the following schedule for implementation of trail use designation changes: a follow-up (one was done in 2006) trail condition assessment will be conducted in the winter and early-spring immediately following license issuance, and all trail segments not requiring major modification will be designated "multiple-use" (to the extent described in the SA-RMP) in the spring immediately following license issuance.
- 229. Page 365, last paragraph DWR believes a balance has already been struck through the ALP as envisioned in the second sentence. This process has furthermore already addressed "the safety concerns and future needs" raised by most entities filing comments in opposition to the proposed trail use designations. Moreover, Staff's proposed modification relating to trails and trails management contains significant additional cost: the recommendations in the preceding paragraph will entail additional work, and the delay in providing expanded access to Project trails will be postponed for a minimum of another three years (reducing recreation benefits to the public and Settling Parties).
- 230. Page 365, paragraphs 1, 2 and 4 and Page 360, paragraph 4 Clarifying Background Information on Trail-related Survey Methods for the R-13 Study:
  - Summary of survey methodology for contacting trail users and sample obtained:
    Although every survey has some weaknesses, the trail user survey sample was obtained using generally accepted survey methodology, and using the methods stated in the study SP-R13. The survey sample obtained (n=991) is very large, much larger in fact than nearly any comparable study would have obtained, and supports a high level of confidence in the survey data. The following material summarizes in some detail the survey methods and the sample obtained.
  - Locations and methods for contacting trail users: Trail users were contacted using the same methodology as used to contact all other activity user groups (boaters, anglers, campers, etc.). The approach taken in conducting the survey sampling recognized that many recreation sites could host several different types of users. Therefore, the survey instrument contained a subsection for three user groups of special interest (trail users, boaters, and anglers) and the surveying schedule was devised to place surveyors at all recreation sites at various times of day and days of the week. In other words, specific survey sites were not scheduled solely to contacts specific types of visitors, such as trail users. That being said, the number of specific types of visitors contacted for the survey was tracked, and special efforts were made to contact trail users when if was found that the sample was relatively small, in particular in the Diversion Pool area.
  - o It is also important to keep in mind that the trail subsection of the survey was not targeted solely to users of the developed, named trails in the study area, such as the Dan Beebe and Brad Freeman trails. Users of the walkway around the North Forebay DUA lagoon and of unofficial trails in the OWA, for example, also considered themselves trail users and were legitimate participants in the survey. Also, some trail users may have limited their use to a relatively small portion of the trails; for example, trail users contacted at Riverbend Park may have used only the loop trail in the park itself and the paved trail along the river between the park and downtown. Again, these are legitimate participants in the survey, and represent users of the most heavily used trail segments in the project area.
  - Trail user sample obtained: A total of 991 of the 2,583 visitors surveyed (38%) on site used or expected to use the trails in the area during their visit and completed the trails section of the survey. Typically several hours were spent at a site for each scheduled survey visit, and windshield surveys were left in some instances when vehicles were present. Surveys for the LOVE ride conducted at the staging area near the Diversion Pool and at pullout accesses to the Dan Beebe Trail along Oroville Dam Blvd. were not regularly scheduled survey locations. Several additional "roving" visits were made to

many of these sites during the spring of 2003 in an effort to increase the number of trail users contacted. Although trail users were contacted at many of the recreation sites across the project, the following table lists the number of survey visits and the number of survey completed at some of the primary trail access survey locations.

Recreation Site	Scheduled Visits	Trail User Surveys
Diversion Pool DUA	41	17
Lakeland Blvd TA	44	14
LOVE ride	NA	19
Riverbend Park	29	77
Dan Beebe pullouts	NA	3
Powerhouse Rd TA	15	4
Bidwell CG	21	49
Saddle Dam TA	39	28
Loafer Creek CG	24	91
Loafer Creek Eq Camp	23	33
Oroville Dam	27	56
Total	263	391

- O The data in the table highlight that although many visits were made to the trailhead accesses, few trail users were contacted per visit. This is particularly true at Diversion Pool sites. Trail counter data indicates that use of the trails on both sides of the Diversion Pool is low or moderate most times of the year. A higher number of trail users were contacted at campgrounds.
- Some local residents have pointed out that some trail users walk or ride their horse or bike to the trails and would not have been available to be contacted at trailheads or other developed sites. No data on this is available, and the survey methodology developed and agreed upon by the Recreation and Socioeconomic Workgroup as stated in the R-13 Study Plan specified developed recreation sites only where surveying would occur. No provision was made in the Study Plan to attempt intercepts of walk-in or ride-in trail users. It is unlikely that this would have been a productive means of contacting trail users, given the likelihood of low levels of use and multiple access points. Finally, there is no reason to believe that these users represent a large portion of trail users, and field observation suggests walk-in or ride-in use is not likely to occur in any area other than the south side of the Diversion Pool, where a residential area is adjacent to public land. In the context of the entire trail system across the project area, this is a small factor in overall trail use and survey sampling.
- O Use of trails near the campgrounds and near day-use areas is highest during the summer, and over 80% of trail user surveys occurred during the May 15 to Sept 15 recreation season. Use of some of the trails appears to be higher in the spring and fall; 175 of the trail user surveys were completed during those seasons.
- About two-thirds of the trail users indicated they were primarily trail walkers/hikers, which corresponds with observation of trail use in the field. Equestrian and bike use of the trails is much lower, with equestrian use in particular focused on certain trails. Trail users who identified themselves as primarily equestrians and bike riders each comprised an approximately equal 14-15 percent of the trail user sample (about 130 surveys from each group). This sample size does not allow conclusions drawn from the data to be made with the same level of confidence as hikers/walkers, but is representative of these groups in the context of the larger trail user population

- 231. Page 366, 5th full paragraph Change "complete resource evaluations" to "completing of resource evaluations." DWR notes Staff recommends 100% coverage of fluctuation zone, which is contrary to the desires of local Native Americans.
- 232. Page 367, 1st paragraph It should be noted that DWR and DPR, upon availability of Cultural Resources Survey results, have taken steps to eliminate "OHV use" and have already implemented a plan for partial site closure when water conditions warrant.
- 233. Page 367, 2nd full paragraph DWR requests clarification of the \$1,783,900 estimated for the "total annualized cost" for the HPMP. This figure seems too low as a total cost and too high as an annual cost.
- 234. 5.1.4.2 Protection of Forest Service Special Status Species (Forest Service 4(e) Conditions No.17), Page 371, 1st paragraph, 1st sentence Here Staff notes that Forest Service 4(e) condition "would require that DWR prepare a biological evaluation of the effects of any proposed project construction activities on Forest Service special status species or their habitat." This should be modified to clarify this condition applies to those proposed project construction activities on Forest Service lands.
- 235. <u>5.3 Fish and Wildlife Agency Recommendations</u>, Page 374, Item 3 Change "September 1" to read "September 9."
- 236. Page 374, Item 4 Consistent with prior comment for page 345, Item #13, this item needs to be re-worded to make it consistent with the Settlement Agreement language. Suggested edits include: "Meet specified water temperature objectives or operate to minimize their exceedances in the low flow and high flow channels according phased approach. A set of water temperature objectives in the Low Flow Channel would be considered targets up until completion of facility modifications after which they would become license requirements. Another set of water temperature objectives in the High Flow Channel\_will be evaluated in the proposed post-license issuance feasibility phase to investigate potential future facility modifications and/or operations. Both the Low Flow and High Flow Channels temperature requirements, once established, will have exceptions for years considered severe dry years under the Oroville Temperature Management Index (OTMI)."
- 237. <u>5.5.1 Water Quality Certification</u>, Page 376, 1st full paragraph DWR has since withdrawn and re-filed its application with the California State Water Resources Board for 401 Certification. And re-filing of DWR's Section 401 WA Cert application (same comments as noted for page 37 above).
- 238. Page 377, 6th line from top of page DWR does not agree that Oroville Dam blocks passage to high quality habitat in the tributaries. Furthermore, Staff should not include the statement that "...the Oroville Facilities and its operation would continue to decrease the amount of high quality habitat available..."
- 239. Page 377, 11th line from top of page The last sentence of first paragraph should be changed from "...proposed improvements to baseline conditions" to read "...proposed improvements from baseline conditions."
- 240. Page 377, 2nd full paragraph DWR strongly disagrees with the "may be likely to adversely affect" finding, which is not supported. The PDEA fully identifies, addresses, and provides mitigation for ongoing effects of the Proposed Action. Virtually all project-related effects are being appropriately mitigated when compared to the appropriate environmental basis of comparison (i.e., 9/2000). Staff should change this to "…is not likely to adversely affect…"
- 241. Page 377, 3rd full paragraph Essential Fish Habitat also has been designated for fall-run Chinook salmon. EFH was designated below the Oroville Dam, but it should be noted that the

- Fish Barrier Dam is the most downstream impassable barrier to Chinook salmon on the Feather River.
- 242. Page 378, 1st full paragraph Comparing the proposed action to pre-Oroville Facilities conditions is inappropriate. The conclusion that the proposed action would continue to adversely affect EFH is incorrect because of the comparison to an inappropriate baseline. Comparison to the appropriate baseline would show that habitat enhancements (e.g., gravel supplementation, LWD supplementation, channel improvement, flow and water temperature improvements, etc.) that benefit spring-run Chinook salmon and steelhead also benefit EFH for spring-run and fall-run Chinook salmon.
- 243. Page 378, 4th full paragraph The DEIS incorrectly states that SWRCB is lead agency for CEQA. For public projects subject to CEQA, a public agency is the Lead Agency for its own projects, even if the project will be located within or under the jurisdiction of another agency. A Responsible Agency is an agency other than the Lead Agency that has legal responsibility for also carrying out or approving a project. For the FERC licensing process, DWR has primary authority under CEQA as they are the agency that will implement the terms and conditions of a new FERC license. The SWRCB will act as a Responsible Agency because they have authority to approve the CWA 401 Certification, as part of the new FERC license. Therefore, DWR is the Lead Agency and the SWRCB is the Responsible Agency under CEQA.
- 244. Appendix B Detailed Costs of the Oroville Facilities Project, Page B-17 and B-18, Article 108 The accompanying comment states that the total cost of environmental measure for temperature improvement is \$52.87 million and it is based on DWR's June 28, 2006 Updated Costs for temperature criteria/targets. However, Table 6.2-4 of that document shows the cost for these measures is \$65 million, including the \$5 million cost of the studies. It is not clear how FERC arrived at \$52.87 million cost estimate.